

Fig. 3. *Plumularia similis*: portion of a plume magnified.

Fig. 4. The same: gonothecæ magnified.

Figs. 5, 6. *Plumularia echinulata*: portions of plume magnified.

PLATE VIII.

Figs. 1-5. *Laomedea angulata*, of the natural size and magnified.

[To be continued.]

PROCEEDINGS OF LEARNED SOCIETIES.

ZOOLOGICAL SOCIETY.

April 23, 1861.—John Gould, Esq., F.R.S., V.P., in the Chair.

DESCRIPTION OF A NEW SPECIES OF THE FAMILY CAPRIMULGIDÆ. BY JOHN GOULD, ESQ., F.R.S., ETC.

CHORDEILES? PUSILLUS.

Crown of the head, back, and lesser wing-coverts dark brown, mottled with grey and rufous, produced by each feather being crossed by interrupted bars of grey on the basal three-fourths, and with rufous near the tip; the greater wing-coverts, tertiaries, and scapularies are similarly marked, but the bands are larger and more freckled, and are mingled grey and rufous, these feathers are also largely tipped with rufous; primaries very dark brown, the three outermost crossed at about two-thirds from their base with a broad band of white, which on the fourth feather assumes the form of a large oval spot; the remaining primaries are marked near their bases with buffy white; upper tail-coverts brown crossed by irregular bands of buffy grey, and encircled with rufous at the tip; two central tail-feathers the same, the lateral ones brown, crossed by bands for three parts of their length from their base, and the two on each side next the central ones with a large spot of white at the tip; on the throat a large arrow-head-shaped mark of white; feathers of the chest brown, tipped with buff, forming a band across this part of the body; under surface crossed by numerous narrow, blackish-brown and greyish-white bars, which latter become larger and whiter as they proceed towards the vent; under tail-coverts white; tarsi naked and, with the feet, mealy-brown.

Total length $5\frac{1}{2}$ inches; wing 5; tail $2\frac{1}{2}$; tarsi $\frac{1}{2}$.

Hab. Supposed to be Bahia.

Remark.—This is by far the smallest Goatsucker I have ever seen, the size of its body not exceeding that of a common Sparrow (*Passer domesticus*). Its gape is entirely destitute of bristles. I believe I have placed it in the right genus; at the same time I may observe that the wings are more curved, and the primaries less resistant, than in the other members of the genus *Chordeiles*. It is doubtless a fully adult male.

NOTE ON THE EGG OF THE PIPING CROW OR MAGPIE OF
NEW SOUTH WALES (*GYMNORHINA TIBICEN*). BY GEORGE
BENNETT, M.D., F.Z.S.

It is not uncommon for eggs of the same species of bird to vary so much both in form and colour, as to cause doubts to arise in the minds of ornithologists as to the possibility of their being produced by the same species. This has been well exemplified in the case of the Red-tailed Tropic Bird (*Phaëton phœnicurus*) more particularly, as well as in others. On examining a number of eggs of the Piping Crow (*Gymnorhina tibicen*), at Sydney, N. S. Wales, I was surprised to observe in how many instances they differed, both with respect to their form as well as in the markings of colour, so as to appear to belong to distinct species, although those differing so much both in form and colour were procured from the nest of the same bird.

The eggs I had so recently an opportunity of carefully examining were collected by two zealous young naturalists, Mr. Edward Ramsey and Mr. Henry Norton. The former gentleman has sent me his notes on the eggs of the Australian Magpie, from which I have collected the following information. He states that "the Piping Crow (*G. tibicen*) lays eggs differing from one another in the same nest, both in form and colour,—some being long and others round, and the coloured spots varying very much. On August 25th, 1860," he says, "the first Magpie's eggs were taken this season. I have six varieties of the eggs of this bird; and so much do they differ from each other, that, had I not taken them from the nest, I could not have believed they were the eggs of the same bird. All the young birds I have taken from the nest have had the breast of a dull-brown colour; and a young bird brought home from the nest in 1859 is now (1860) changing the plumage of the breast from the dull-brown colour to black."

NOTE ON THE GENUS *BASILORNIS*.

BY G. R. GRAY, F.L.S., ETC.

The genus *Basilornis* was established some years back by the late Prof. Temminck on a bird from Celebes. Since then Mr. Wallace has met with another species in his wanderings in Ceram. As there exists some confusion with regard to these two species, I have thought it right to address to the Society a few remarks on them, with a view of pointing out their distinctive characters. They are easily distinguished from one another by the form of their crests. That of Celebes possesses a short, compressed, keel-like crest, which extends from the culmen to behind the head, and is composed entirely of scale-like and convex feathers; whilst that of Ceram has an occipital, erect and elongated crest, which, when viewed sideways, assumes somewhat of a subtriangular form, and is composed of truncated, rather broad and lax plumes. It also differs in having the nostrils exposed and a naked space round each eye. In the species of Celebes the nostrils are covered by the frontal plumes, and there is scarcely any naked space round the eyes.

Wagler in 1827 described a bird from Java (?) under the name of *Pastor corythaix*, the characters of which agree with the Ceram and not the Celebes species, with which it has been confounded by Pr. Bonaparte and other writers.

The specific characters of the two species are subjoined—viz.

BASILORNIS CORYTHAIX (fig. 1).

Top of the head rich glossy purplish black ; crest bronzy black ; nape, back, and beneath the body glossy chalybeous ; wings fuscous, paler at the base of the inner web ; tail bronzy black, with the outer



Fig. 1.

feathers black with green edges ; spot below each eye, a patch on each side of breast, and some scattered hairs on the throat, white.

Pastor corythaix, Wagl. Syst. Av.

Basilornis corythaix, Pr. B. Consp. Av. p. 420.

Heterornis corythaix, G. R. Gray, Gen. of B. ii. p. 335.

Hab. Ceram (*Wallace*).

BASILORNIS CELEBENSIS (fig. 2).

Head rich glossy steel black ; crest rich glossy purplish black ; back, breast, and abdomen chalybeous ; quills fuscous black ; tail bronzy black, with the outer feathers greenish black ; a spot beneath each eye, and a patch on each side of breast, white, partly tipped with buff ; throat with some scattered white plumes, hair-like at base

and dilated at the tip of each; nape and upper part of back furnished with a few scattered buff plumes.

Basilornis celebensis, Temm. MS.

Basilornis corythair, p., Pr. B. Consp. Av. p. 420 (descrip.).

Hab. Celebes (Menado, Makassar) (*Wallace*).

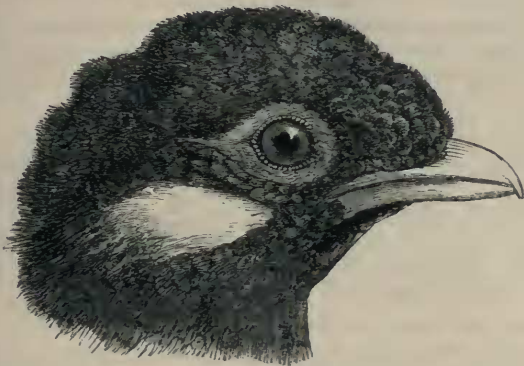


Fig. 2.

ON A NEW SPECIES OF THE GENUS *COPSYCHUS* FROM BORNEO. BY P. L. SCLATER, M.A., PH.D., SECRETARY TO THE SOCIETY.

COPSYCHUS SUAVIS.

Nigro-sericea, alis extus fusciscentioribus; abdomine saturate castaneo; dorso imo et caudæ rectricibus lateralibus candidis, harum quatuor mediis et proximæ utrinque pogonio interiore nigris: rostro nigro, pedibus pallide fuscis.

Long. tota 9·0, alæ 4·0, caudæ 4·5.

Hab. In Borneo meridionali.

Obs. Affinis *Copsycho macruro*, sed statura majore, cauda brevior et rectricum pictura diversus.

I have selected two examples of this pretty species of *Copsychus* out of a small collection of bird skins from Banjermassing in Southern Borneo, now in the hands of Mr. S. Stevens. Its nearest ally is that well-known beautiful songster the *Copsychus macrurus* of India, from which, however, it is readily distinguished by its larger size, shorter tail, and the three lateral rectrices, as well as the outer web of the next pair, being wholly of a pure white. There are, however, blackish edgings at the base of the inner web of the second and third pair in one of the specimens, which I take to be a male. In the other, which is probably the female, these are absent, and the three external pairs of rectrices are wholly white, the belly is paler chestnut, the plumage above more dusky, and the size smaller.

I think this species having the tail of *Copsychus* and the colours of the so-called genus *Kittacincla*, justifies us in uniting these two

groups, which, as far as I can see, only differ in the elongation of the tail in the latter.

SECOND LIST OF SIAMESE REPTILES. BY DR. ALBERT
GÜNTHER, FOR. MEM. ZOOL. SOC.*

Having examined the Saurians, Ophidians, and Batrachians of M. Mouhot's collection, lately transmitted from Chartaboum, on the coast of Siam, to this country, I shall first describe the new species, and then add a complete list of the whole series. Typical specimens of them have been retained for the British Museum.

1. DRACO TÆNIOPTERUS.

Tympanum not scaly; nostrils above the face-ridge, directed upwards; a low longitudinal fold on the neck. Scales on the back of equal size, obscurely keeled. Gular sac covered with large smooth scales, uniformly coloured. Wings dark-greenish olive, with five arched black bands, not extending to the margin of the wing, some being forked at the base.

2. ACANTHOSAURA CORONATA.

The upper orbital edge serrated, without elongate spine posteriorly; a short spine on each side of the neck; a yellowish-olive band, edged with black across the crown, from one orbital edge to the other; an oblique, short, yellowish band, broadly edged with brown, from below the orbit to the angle of the mouth.

This and the following species belong to the genus *Acanthosaura*, as defined by Dr. Gray (Catal. Liz. p. 240). The tympanum is distinct; a short spine between it and the dorsal crest, which is rather low. No femoral or præanal pores. A short spine behind the orbital edge, and separated from it by a deep notch. Back and sides covered with small, smooth scales, slightly turned towards the dorsal line, and intermixed with scattered larger ones, which are keeled; belly and legs with larger, keeled scales. Tail slightly compressed at the base, the rest being round and without crest; all its scales are keeled, those on the lower side being oblong and provided with more prominent keels. Throat without cross-fold and without distinct longitudinal pouch; a slight oblique fold before the shoulder.

3. ACANTHOSAURA CAPRA.

The upper orbital edge not serrated, terminating posteriorly in a long moveable horn; no spine above the tympanum or on the side of the neck. Nuchal crest high, not continuous with the dorsal crest, which is elevated anteriorly. Crown and cheek without markings.

The tympanum is distinct; no femoral or præanal pores. Back and sides covered with small, smooth scales, which become gradually

* I take this early opportunity of remarking that I have convinced myself of the correctness of Messrs. Duméril and Jan's observation with regard to the denotation of *Herpeton* (see 'Annals,' ser. 3. vol. vii. p. 195). The groove of the posterior maxillary tooth can be distinctly seen even in the transparent teeth of fresh specimens, like those in the British Museum, when viewed with a strong magnifier from the front of the mouth.—Günther.

larger and more distinctly keeled towards the belly ; no large scales intermixed with the small ones, only a few appear to be a little larger than the rest. Tail slightly compressed at the base, surrounded by rings of oblong, keeled scales. Throat expansible ; a very slight fold before the shoulder.

4. DILOPHYRUS MENTAGER.

Dorsal crest not interrupted above the shoulder, interrupted above the hip ; caudal crest as high as that on the back ; no large scales on the side of the neck ; sides of the throat with large convex or tubercular scales.

This species belongs to the genus *Dilophyrus*, Gray (Catal. Liz. p. 238). A high crest, composed of sabre-shaped shields, extends from the nape of the neck to the second fifth of the length of the tail, being interrupted above the hip. Scales on the back and the sides of equal size, very small, with an obscure keel obliquely directed upwards ; those on the belly smooth, on the lower side of the tail rather elongate, strongly keeled. Tympanum distinct. Throat with a cross-fold. Orbital edges and sides of the neck without spines. Tail transversely banded with black.

One stuffed specimen is 30 inches long, the tail occupying 21.

5. TROPIDOPHORUS MICROLEPIS.

Snout rather narrow and produced. Scales on the back strongly keeled, the keels not terminating in elevated spines. Back of the tail with two series of moderately elevated spines, the series not being continuous with those on the back of the trunk. Scales of the throat smooth, or very indistinctly keeled. Tail with a series of plates below, which are much larger and broader than the scales of the belly. Three large præanals. A single anterior frontal (internasal)*.

6. SIMOTES TÆNIATUS.

Scales in nineteen rows. Brownish-olive, with a brown longitudinal dorsal band enclosing an olive-coloured line running along the vertebral series of scales ; another brownish band along the side of the body ; belly whitish, chequered with black.

One loreal shield ; one anterior and two posterior oculars ; eight

* This is the third species of *Tropidophorus*. The two others are :—

1. *TROPIDOPHORUS COCHINCHINENSIS* (Cuv.) : Dum. Bibr. v. p. 556. pl. 57. f. 1.—*Tropidosaurus montanus*, Gray in Griffith, Anim. Kingd. ix. App. p. 35.

Snout rather obtuse. Scales on the back strongly keeled, the keels terminating in slightly elevated spines. Two series of moderately elevated spines along the middle of the back of the tail, the series being continuous with those on the back of the trunk. Tail with a band of large hexagonal plates below ; two large præanal scales. Two pairs of anterior frontal shields. Cochinchina.

2. *TROPIDOPHORUS GRAYI*, n. sp. (*T. cochinchinensis*, Gray, not Cuv.).

Snout rather narrow and produced. Scales on the back as well as those on the tail with an exceedingly strong, lamelliform keel, elevated and spinous posteriorly. Two series of spinous keels on the back of the tail, continuous with those on the back of the trunk. Tail with rhombic scales below, which are not much larger than those of the belly. Scales of the throat strongly keeled. Three large præanal scales. Two pairs of anterior frontal shields.

Philippine Islands. Three specimens in the British Museum.

upper labials, the third, fourth and fifth of which enter the orbit ; 155 ventral plates ; anal entire ; 44 pairs of subcaudals. Head with the markings characteristic of the genus ; each half of the dorsal band occupies one series of scales and two halves ; the lateral band runs along the fourth outer series, touching the third and fifth.

We were previously (Proc. Zool. Soc. 1860, p. 113) enabled to enumerate 25 species of Siamese Reptiles, which number is raised to 42 by the following list.

Those which have been mentioned in the account of the first collection are marked with an asterisk.

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| 1. <i>Dracunculus maculatus</i> ,
Gray. | 12. <i>Hemidactylus frenatus</i> ,
Schleg. |
| 2. <i>Draco tæniopterus</i> , Gthr. | *13. <i>Gecko verus</i> , Merr. |
| 3. <i>Bronchocela cristatella</i> ,
Kuhl. | 14. <i>Cylindrophis rufa</i> , Laur. |
| 4. <i>Acanthosaura armata</i> ,
Gray. | 15. <i>Python reticulatus</i> , Schneid. |
| 5. — <i>coronata</i> , Gthr. | 16. <i>Simotes tæniatus</i> , Gthr. |
| 6. — <i>capra</i> , Gthr. | 17. <i>Homalopsis buccata</i> , L. |
| *7. <i>Calotes versicolor</i> , Daud. | *18. <i>Tropidonotus quincunciatus</i> ,
Schleg. |
| 8. <i>Dilophyrus mentager</i> , Gthr. | 19. <i>Dendrophis picta</i> , Gm. |
| 9. <i>Leiolepis Bellii</i> , Gray. | 20. <i>Rana tigrina</i> , Daud. |
| 10. <i>Tropidophorus microlepis</i> ,
Gthr. | *21. <i>Oxyglossus lima</i> , Tschudi. |
| 11. <i>Platyurus Schneiderianus</i> ,
Shaw. | *22. <i>Bufo melanostictus</i> , Schn. |
| | *23. <i>Polypedates maculatus</i> ,
Gray. |

May 14, 1861.—Dr. J. E. Gray, F.R.S., V.P., in the Chair.

DESCRIPTIONS OF TWO NEW SPECIES OF HUMMING-BIRDS
BELONGING TO THE GENUS HYPUROPTILA. BY JOHN GOULD,
ESQ., F.R.S., ETC.

HYPUROPTILA UROCHRYSA.

Head and upper surface dark green, becoming of a bronzy hue on the wing- and tail-coverts ; wings purplish brown ; tail rich golden-bronze both above and beneath ; throat and breast grass-green ; thighs, vent, and under tail-coverts pure white ; upper mandible black ; under mandible fleshy-red, with a black tip ; tarsi yellow or flesh-colour.

Total length $4\frac{3}{4}$ inches ; bill $1\frac{1}{8}$; wing $2\frac{3}{4}$; tail $1\frac{7}{8}$; tarsus $\frac{1}{4}$.

Hab. Panama.

Remark.—This species closely resembles the *H. Buffoni* in size and in the colouring of its body ; but the rich golden bronzy hue of its tail at once distinguishes it from that and every other species.

HYPUROPTILA ISAURÆ.

Head, all the upper surface, wing-coverts, flanks, and abdomen coppery-bronze, inclining to purple on the lower part of the back and upper tail-coverts ; wings purplish brown ; tail very dark bronze,

inclining to purple; throat and breast grass-green; under tail-coverts white; upper mandible black; under mandible fleshy, with a black tip; tarsi yellow or flesh-colour.

Total length $4\frac{2}{3}$ inches; bill $1\frac{1}{8}$; wing $2\frac{5}{8}$; tail $1\frac{3}{4}$; tarsi $\frac{1}{4}$.

Hab. Bocca del Toro, in Costa Rica.

Remark.—The specimen from which the above description was taken is somewhat immature; it is, however, sufficiently advanced to show that it would have, when adult, a fine green breast; but whether the green colour would extend over the abdomen I am unable to say. It is nearly equal in size to the *H. urochrysa*, *H. Buffoni*, and *H. cæruleigastra*; but it has a shorter wing and a more rounded tail than either of those species, and the under tail-coverts, although white, are less plume-like in form than in the typical *Hypuroptilæ*. It is just possible that it may be necessary to separate this bird into a new genus when we see it in its fully adult state; but it appears at present to be most nearly allied to the members of the group in which I have provisionally placed it. I received this bird from M. Edouard Verreaux, of Paris, many years ago, since which I do not remember to have seen another.

The specific name *Isauræ* was suggested to me by my late highly valued friend the Prince Charles Lucien Bonaparte, who wished thus to convey a compliment to Madame la Baronne de la Fresnaye, the niece of Montbeillard, the able coadjutor of the celebrated Buffon.

NOTE ON THE OCCURRENCE OF *FILARIA SANGUINEA* IN THE BODY OF THE *GALAXIAS SCRIBA*, A FRESHWATER FISH FROM AUSTRALIA. BY W. BAIRD, M.D., F.L.S.

In the beginning of this year, some time in February, several freshwater fishes belonging to the genus *Galaxias* were brought over to this country, alive, from the Murray River, Australia. Though several survived the passage across the Atlantic, only one reached the hands of the importer, Mr. Lloyd, alive.

This little fish was then placed in the freshwater Vivarium in the Zoological Gardens, Regent's Park, but it only lived about a week there, dying in the beginning of March. Upon an inspection of the body after death, an intestinal Worm was discovered making its appearance through the skin near the left pectoral fin. A more minute examination discovered the existence of an abscess in that part of the body, upon opening which I took out five specimens of a small Worm which occupied the cavity of the abscess, and were apparently making their way through the integuments of the fish. The abscess communicated with the peritoneal cavity of the *Galaxias*, and had evidently caused its death. Upon examining the Worms, they appear to be identical with the species first described by Rudolphi as being found by him lodged under the integuments of the caudal fin of the *Cyprinus gibelio*, or Crucian Carp, and named by him *Filaria sanguinea*. This species has since been found by Creplin in the cavity of the abdomen of the *Leuciscus rutilus*, or common Roach, and by Siebold in the *L. erythrophthalmus*, the Red-eye or Rudd. The spe-

cimens taken from the *Galaxias* are from $1\frac{1}{4}$ to 3 inches in length, and, as Rudolphi has described them, they are thickish in form, obtuse at both extremities; and the larger ones were of a blood-red colour, which, however, has disappeared since they were placed in spirits. It was interesting to discover whether this was a new species or not, and whether it had existed in the body of the fish before it left Australia. A comparison with the specimen of *Filaria sanguinea* in the collection of Entozoa in the British Museum, transmitted to us by Mr. Siebold, leaves no doubt on my mind of its identity with that species; and therefore in all probability these Worms have been developed in the cavity of the abdomen of this little *Galaxias* since it was placed in the tank at the Zoological Gardens, or during its passage from Australia to this country.

MISCELLANEOUS.

Observations on the Existence of various Mollusca and Zoophytes at very great Depths in the Mediterranean. By Dr. ALPH. MILNE-EDWARDS.

IN this memoir the author, who appears to be ignorant or regardless of the still more striking observations of Dr. Wallich, published in this Journal, communicates some instances of the occurrence of animal life at great depths in the sea. Two examples were communicated to him by M. Valenciennes,—one of *Voluta junonia*, Sch., taken by Capt. Letourneur, in the Gulf of Mexico, at a depth of about 70 fathoms; the other of *Lima excavata*, Müll., dredged from a depth of 264 fathoms, by M. Hoeg, on the coast of Greenland.

The other instances cited by the author were obtained by the examination of portions of the submarine telegraphic cable formerly laid between Sardinia and Algeria, and removed in consequence of some defect causing the interruption of the communication. The fragments examined by Dr. Milne-Edwards were brought up from the broad submarine valley, measuring from 1000 to 1500 fathoms in depth, between Bône and Cagliari; and amongst the foreign bodies adhering to them the author found several polypidoms and shells which were still living when removed from the water. One of the mollusks was a species of Oyster (*Ostrea cochlear*) which is met with abundantly in various parts of the Mediterranean, and is known to inhabit deep water, as it is frequently brought up by the coral-fishers, whose operations are generally carried on at from 50 to 75 fathoms. The animal had evidently attached itself to the cable when very young, and here attained its adult condition; for its lower valve, about $2\frac{2}{5}$ inches in diameter, had completely moulded itself upon the surface of the cable, and had become deformed in order to embrace one-half of its circumference. On another point there was also attached, although less firmly, a specimen of the common Mediterranean *Pecten opercularis*, Lamk., of the variety *P. Audouini*, Perrod. There was also another *Pecten* which is very rare in col-